

Toolset On-line User Guide:

D-FlowMaster

HP/ElectraLink DTS

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1 DOCUMENT AUTHORISATION

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	NAME	SIGNATURE	DATE
AUTHOR(S)	Gareth Hughes		
REVIEWER(S)			
HP	Alan McDonald		
ElectraLink	Mark Pearce		
	NAME	SIGNATURE	DATE
ON BEHALF OF HP			
ON BEHALF OF ELECTRALINK			

2 D-FLOWMASTER

D-FlowMaster™ allows users to create or modify User Files. It supports all file formats: variable User File Format, fixed User File Format and Pool Transfer File format. Please contact the ElectraLink Help Desk if you wish to use this facility.

With this tool, users can open and save User Files on their local file system. However, being a browser based application, D-FlowMaster™ is subject to strict security constraints that are designed to protect users from malicious code inadvertently loaded while browsing the internet. These security constraints prevent browser based applications from accessing local file systems unless specific permission is granted by the user of that workstation.

Details of how to create a Java™ security policy file to allow D-FlowMaster™ to read and write files on your local file system are provided in Appendix A.

D-FlowMaster™ also requires the user to have installed the SUN Java Plug-in on their workstation. SUN JRE version 1.5 is the recommended and supported version.

2.1 EDITOR

The editor is the principal component of D-FlowMaster™. To invoke the editor select “D-FlowMaster” from the navigation menu on the left hand side of the browser window and then select “Editor” from the sub-options. If the “D-FlowMaster” menu option is not present, contact the ElectraLink Help Desk.

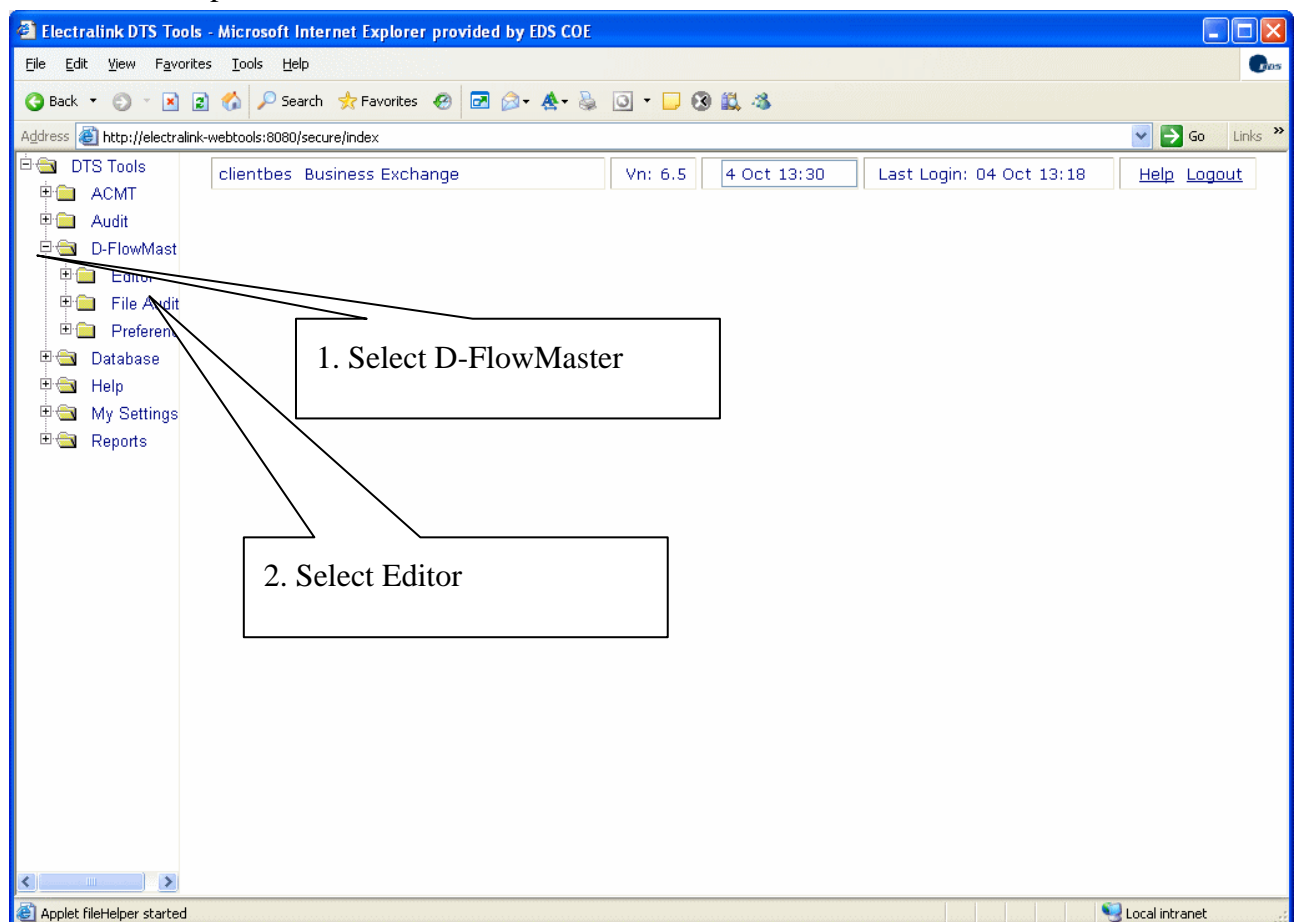


Figure 2-1 D-FlowMaster Menu

Once invoked the browser window will show an empty editor as shown below:

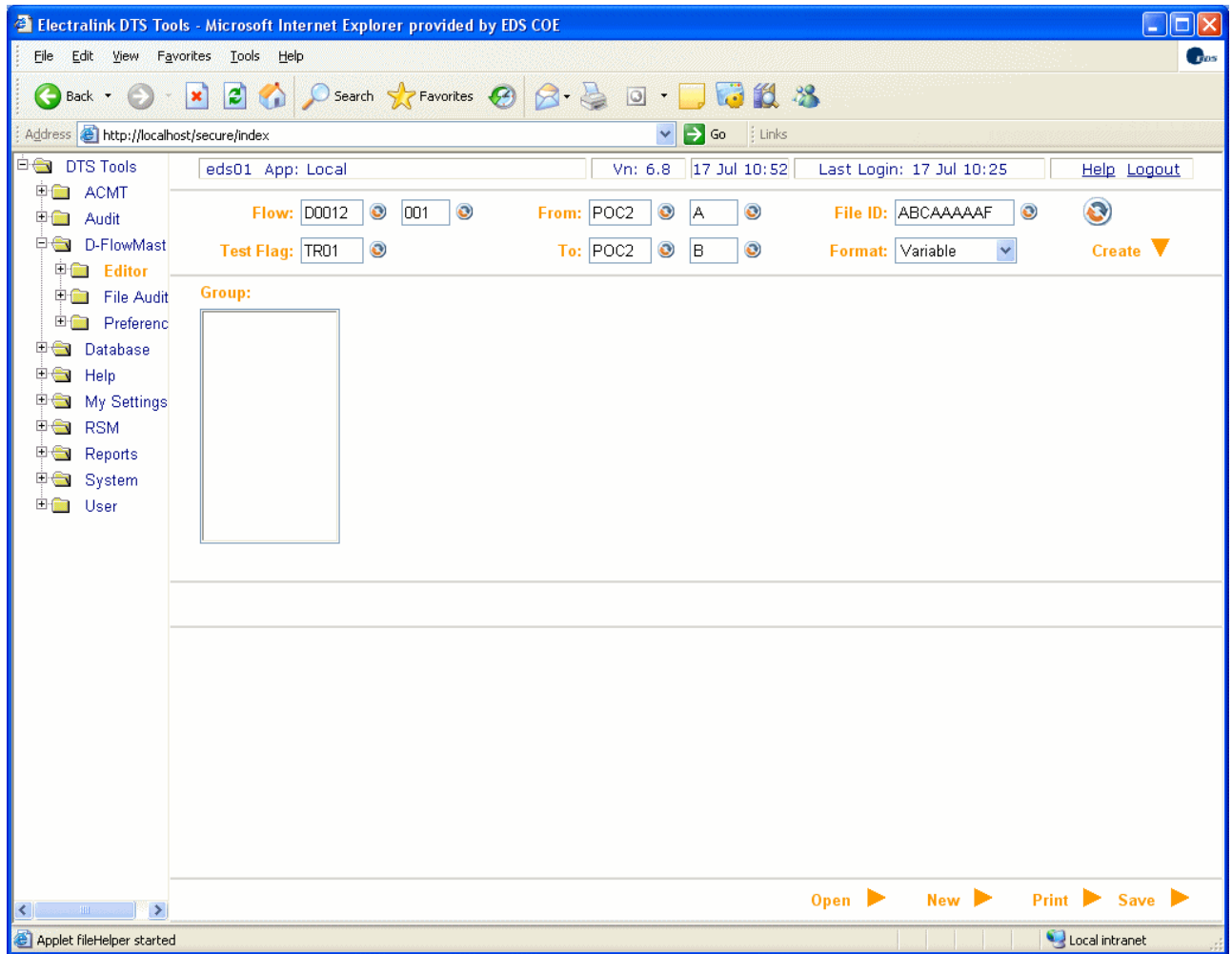


Figure 2-2 D-FlowMaster Editor

The editor is subdivided into number of different functional areas as described below. These will be referred to in subsequent sections of this Guide.

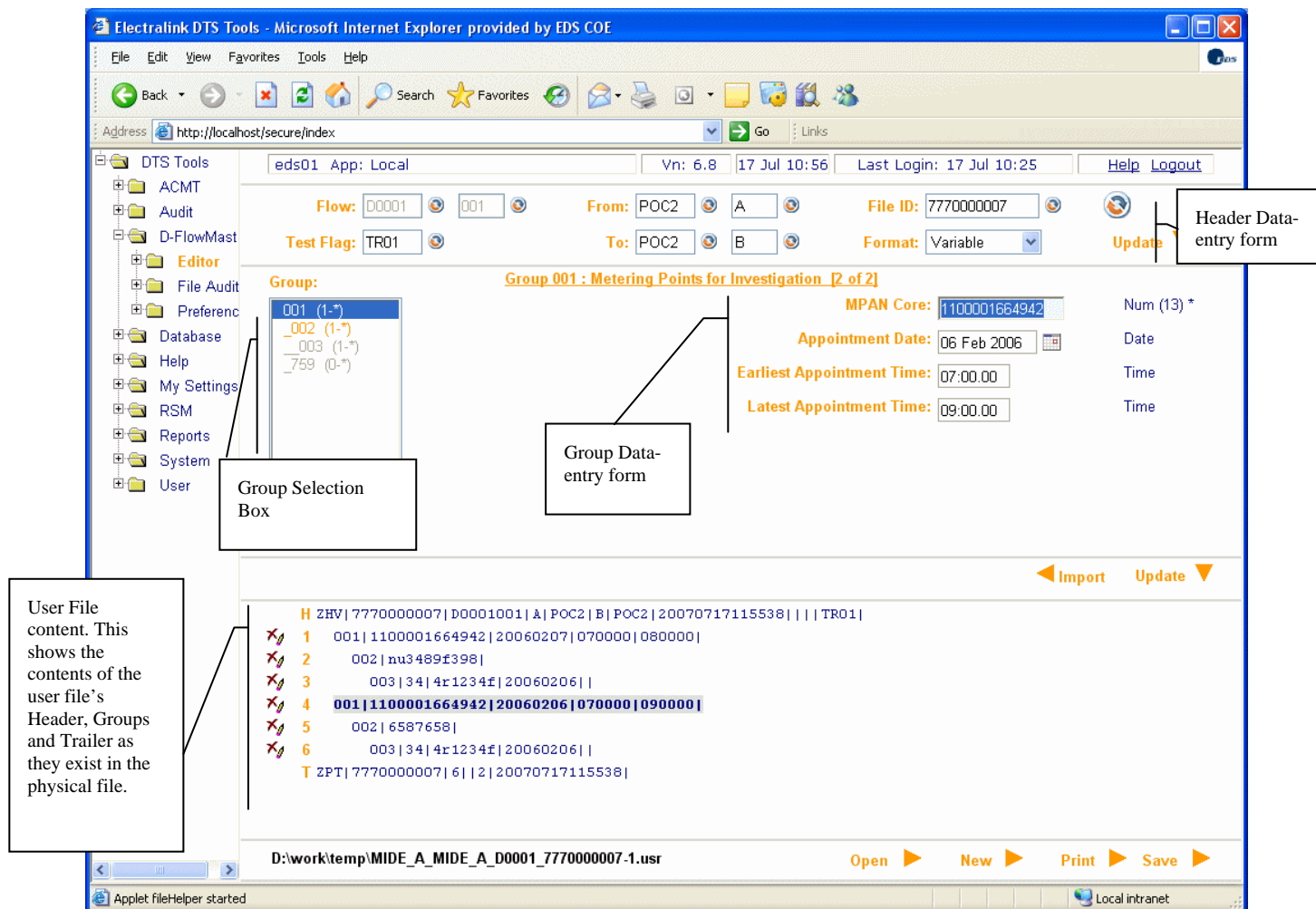


Figure 2-3 D-FlowMaster Editor



2.1.1 To create a new file

To create a new user file:

1. Review and if necessary modify the Data Flow Id and version in the Header data-entry form. You may type values directly, press F1 while the cursor is in a field and select a value from the pop-up list, or revert to default values defined in your preferences (see below).
Note: a pop-up list of valid version numbers will only be displayed once a valid Data Flow Id has been entered. After changing the flow id, the version number will, by default, be set to the most recent (highest) version number for that flow.
2. Review and if necessary modify the 'From' MPID and Role Code in the Header data-entry form. Again, pressing F1 while the cursor is on one of these fields will display a pop-up list of MPIDs or Role Codes as appropriate.
3. Accept, or overwrite the system generated File Id. (For more information on system generated File Ids, see the section on setting preferences below).
4. Review and if necessary modify the Test Flag. Pressing F1 while the cursor is in the field labelled 'Test Flag' will display a pop-up list of the standard test flags.
5. Review and if necessary modify the 'To' MPID and Role Code in the Header data-entry form. As before, pressing F1 while the cursor is on one of these fields will display a pop-up list of MPIDs or Role Codes as appropriate.

6. Select a file format from the available options.

7. Press enter (↵) or click on 'Create'.

Note: You may revert header fields to their default values by clicking on the  icon to the right of the field or the  at the far right of the header data entry form.

Note: Administrators are able to lock header fields in the Header data-entry form, thus preventing users from selecting any other value than the default value defined in the user's preferences. Fields that are locked in this way will be disabled, appear greyed out, cannot be modified and do not respond to the F1 key.

At this point the tool requests the Data Flow structure details from the central server. Depending on the 'Flow requirements' preference, the tool may also check whether the 'From' and 'To' MPID and Role combinations are compliant with the Flow requirements defined in the Data Transfer Catalogue (DTC) and ElectraLink Flow Dictionary (EFD). The screen shot below shows a scenario where the 'Flow requirements' preference is set to the default 'Warn on invalid MPIDs and Roles' and the user has attempted to create a flow with both invalid sender and receiver MPIDs.

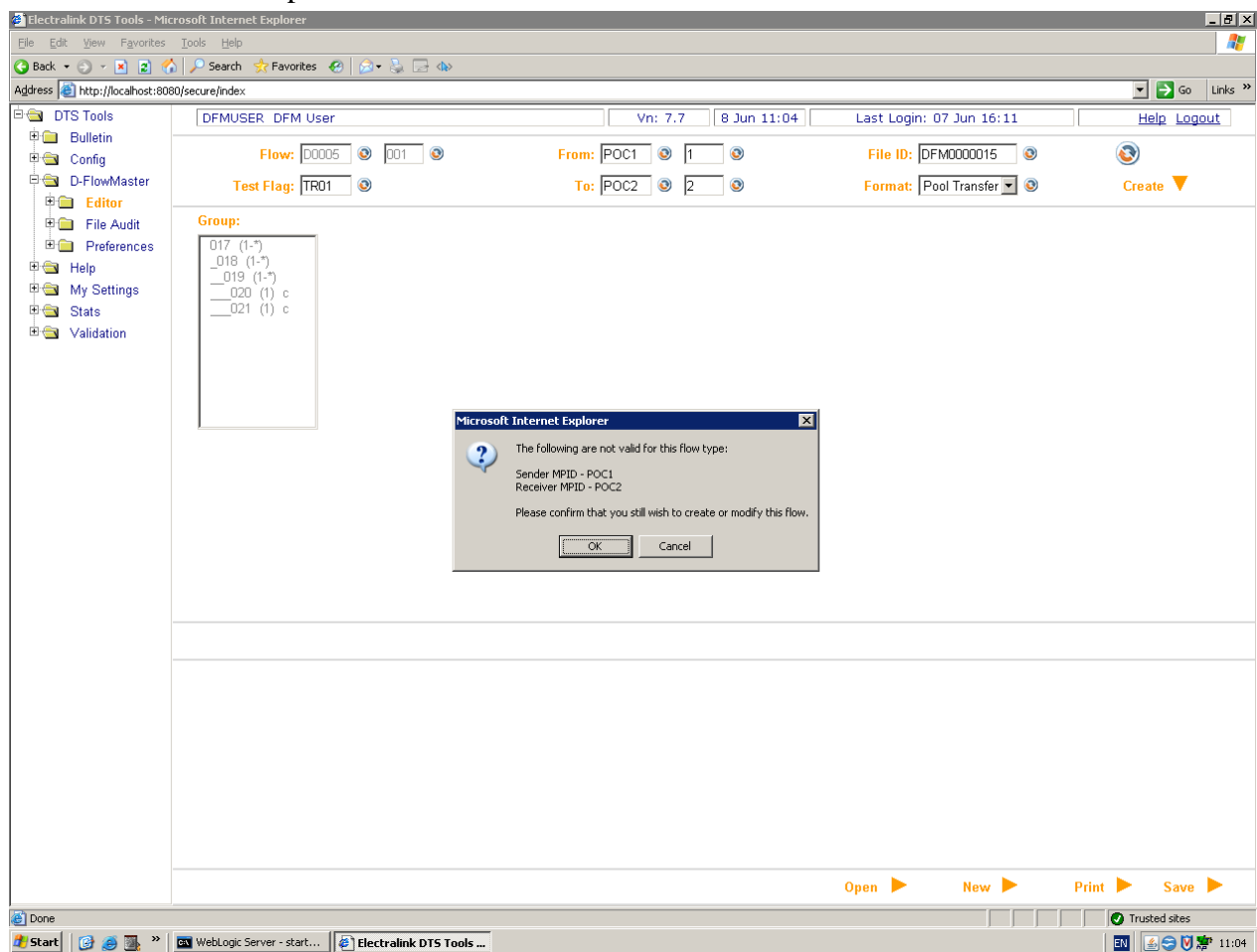


Figure 2-4 D-FlowMaster File Creation

To continue, press enter (↵) or click on OK.

After acknowledging the warning, or if no such warning was given, the editor will display the header and trailer records of an otherwise empty file in the User File content area of the screen. The Group data-entry form area displays a form for the first Group expected for this flow type.

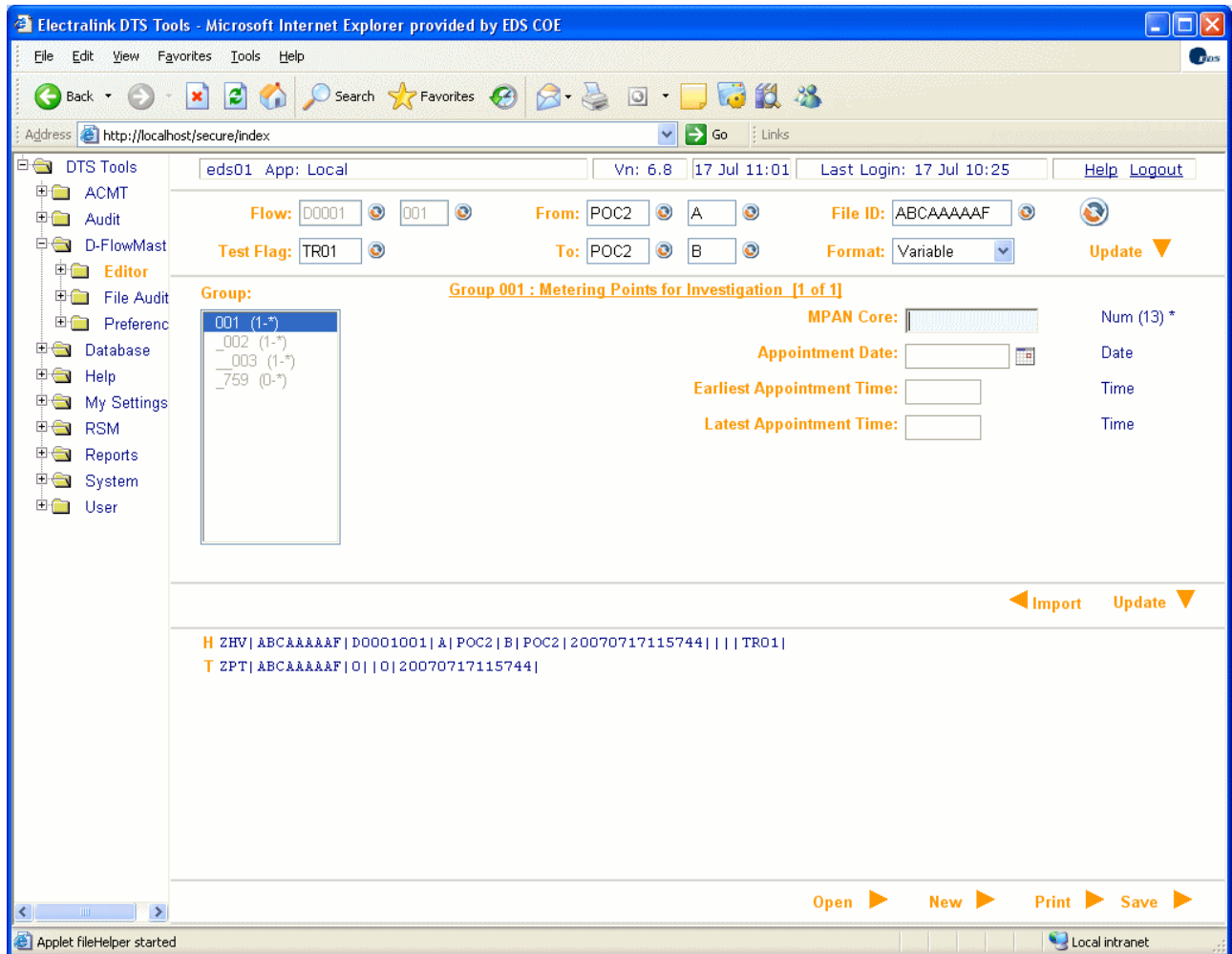


Figure 2-5 D-FlowMaster File Creation

If necessary you can amend the header details by filling in the Header data-entry form at the top of the screen and pressing enter (↵) or clicking on 'Update'.

To add Groups to the file, see [Inserting Groups](#) below.

2.1.2 Opening an existing file

To open an existing file, click on 'Open' at the foot of the browser window. You will then be presented with a file browser showing the contents of your specified base directory. (For further information on specifying a base directory see [Preferences](#) below).

Use the file browser to navigate to the file you want to edit.

Note: The files and directories you are able to browse will depend on the Security Policy in force on your workstation. See [Security Policy](#) for details on how to define the Security Policy for your workstation.

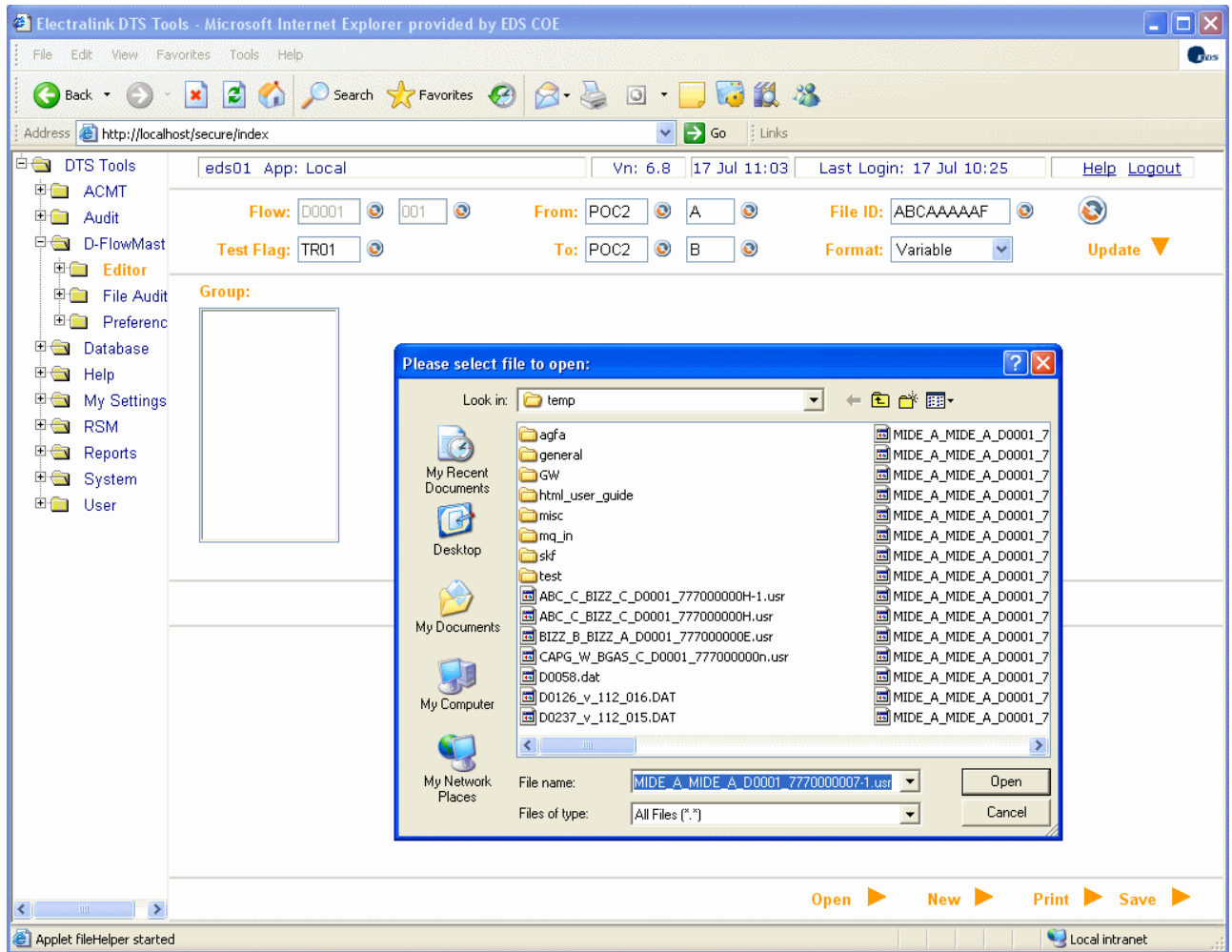


Figure 2-6 D-FlowMaster Open Existing File

Select the file you want to edit and then press ‘Open’.

If the file is larger than 50kb a message, warning you that loading and validating the file may take a long time will be displayed. On being presented with this warning you will have the option of proceeding to load the file or cancelling the operation. If the file is less than 50Kb, or you choose to open the file regardless of its size, the file will be loaded into the editor and validated. Validation errors are presented in the middle of the screen. e.g.

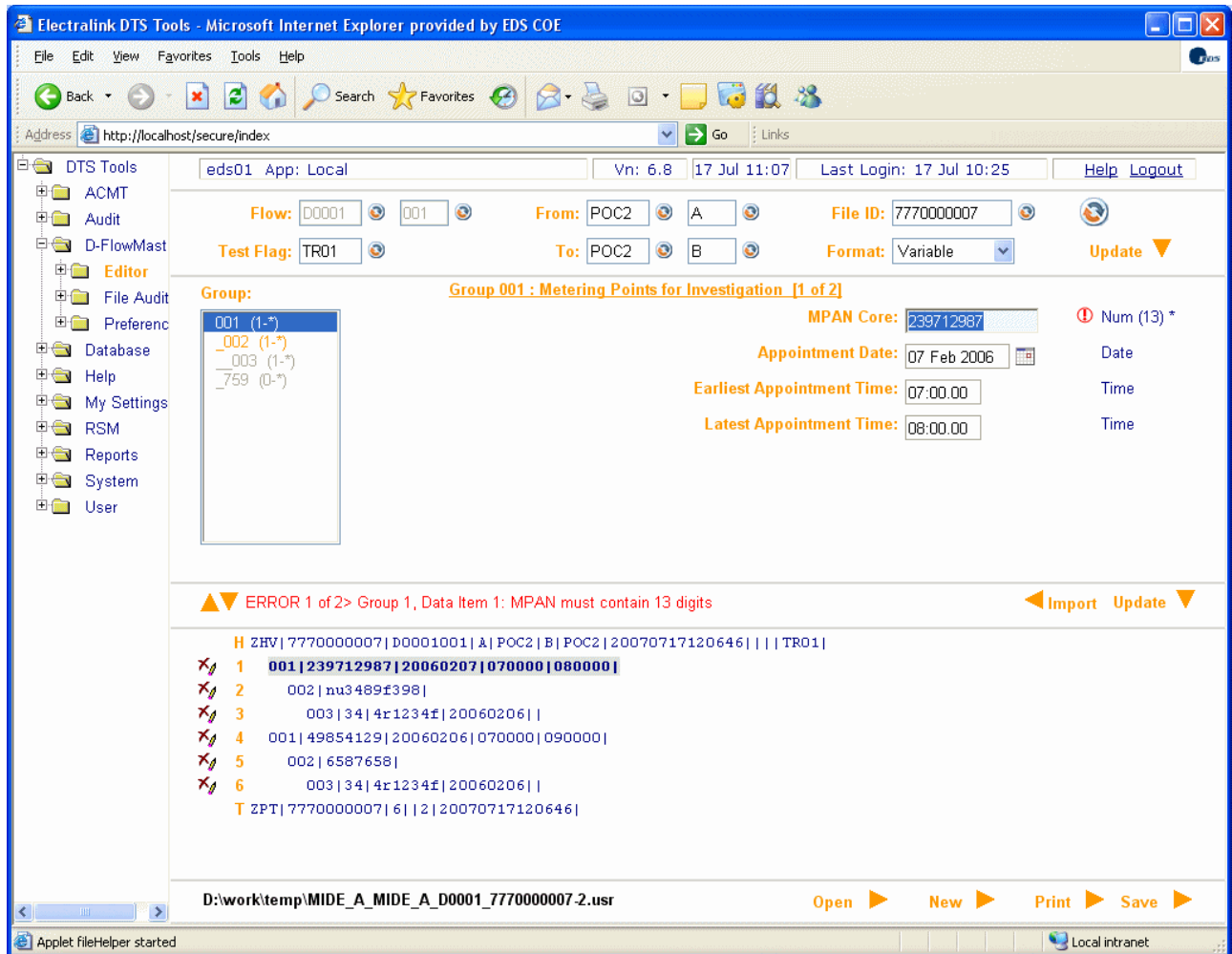


Figure 2-7 D-FlowMaster Existing File Loaded

The Group in error is highlighted in the User File content area of the screen and displayed for editing in the Group data-entry form area of the screen.

If there is more than one validation error you can scroll through the other errors using the right and left arrow buttons next to the 'Error' label. As you scroll through the errors the editor will highlight the Group in error and display it for editing.

2.1.3 Saving a file

After creating a new file in the editor (or modifying an existing one) you should save it to your local file system by clicking on the 'Save' button at the foot of the browser window.

When you choose to save your file, the editor will validate your document. If the document is invalid a message will appear asking whether you really want to save the document in an invalid state.

If you choose to continue, or if the document is valid, the file will either be saved directly to the base directory or a file browser window will appear allowing you to select the name and location of the file to be saved. The **"Always Save to base Directory?"** preference controls whether the file is saved directly to the base directory or not.

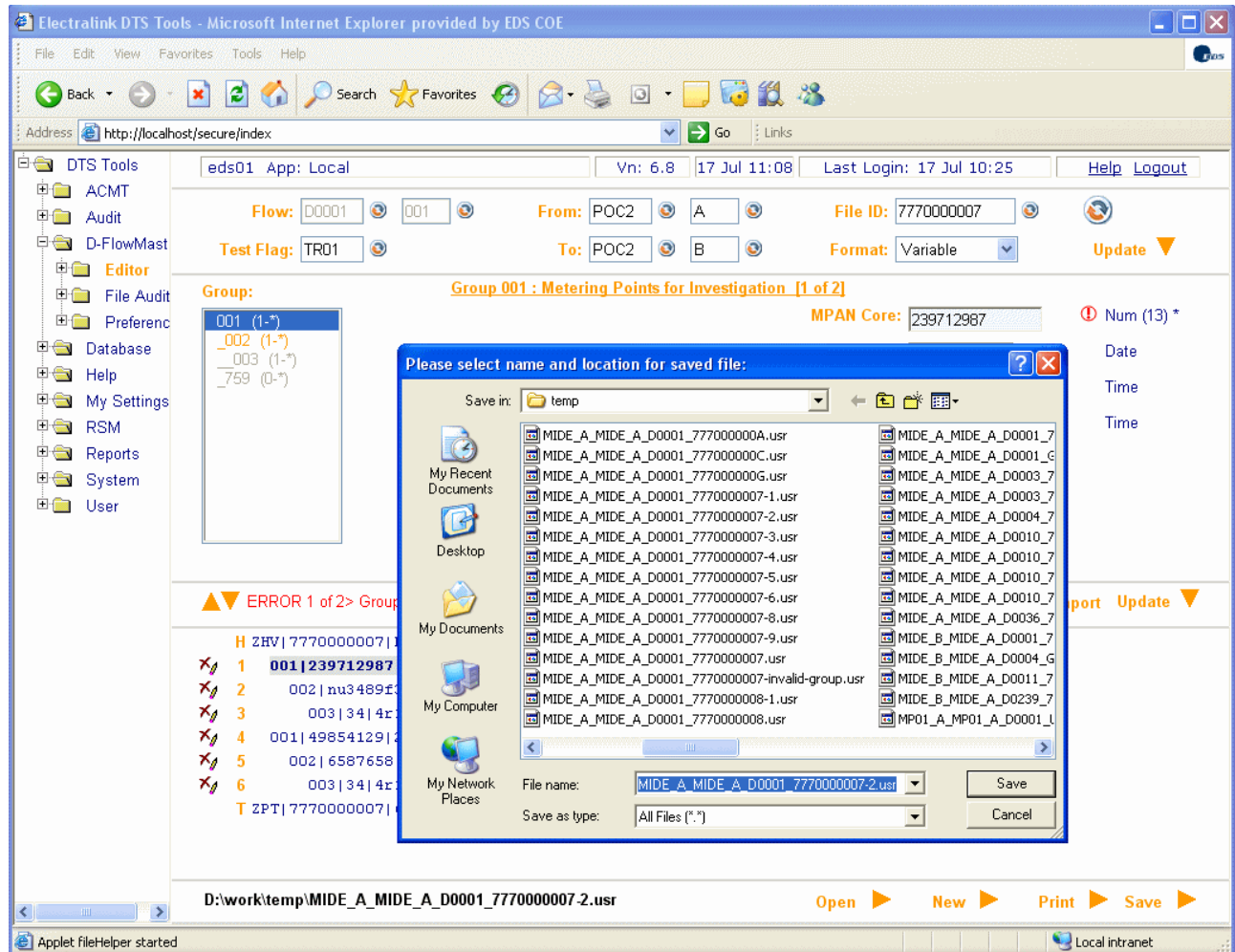


Figure 2-8 D-FlowMaster Saving A File

The locations where the file can be saved will depend on the security policy in force on your workstation (see [Security Policy](#)).

If the file is a newly created file, the filename will be generated in accordance with the user's defined **"Custom Filename Template"**. If that is not defined, the filename will default to combination of the header fields as follows:

```
<to_mpid>_<to_role>_<from_mpid>_<from_role>_<flow_id>_<file_id>.usr
```

If the file was loaded into the editor from the local file system the name will depend on the **"Always use Filename Template?"** preference. If the preference is set to 'No', the filename will default to the name of the loaded file. If set to 'Yes' the filename will be generated in accordance with the filename template, thus reflecting any changes to the file's header or other attributes that affect the name.

In either case the name of the file may be changed from that suggested before saving if the **"Always Save to base Directory?"** preference is set to 'No'.

If the **"Update File Id on Save?"** preference is set to 'Prompt', the user will then be asked whether the Id of the currently loaded file should be updated. If the user clicks 'OK', or the **"Update File Id on Save?"** preference is set to 'Always', the Id of the current document will be changed to the value of the 'Next File Id'. This effectively creates a new document as a copy of the one just saved.

If the **"Update File Id on Save?"** preference is set to 'Never', no change to the loaded document is made.

2.1.4 Appending Groups

After creating a new file, the editor will enter into 'Append' mode. This is indicated by the right-most button on the function bar in the middle of the browser window.

To append a record to the file immediately before the trailer record, complete the Group details in the Group data-entry form and press enter (↵) or click on 'Append'.

The editor will remain in 'Append' mode until a Group other than the last one in the file is selected.

To append a Group to the end of file when the editor is currently in 'Insert' or 'Update' mode:

Click on the last Group in the file (i.e. the one immediately preceding the trailer record). This will select that record and place the editor in 'Update' mode.

To change to 'Append' mode, click on the code of the Group to be appended in the Group selection box. The keyboard equivalent is to use SHIFT-TAB while the cursor is positioned on the first field of the data entry form and then use the cursor-up and cursor-down arrow keys to select the desired group. Once the desired Group is highlighted in the group selection box, press ENTER to create a data entry form for that Group.

The appended group will be displayed in lower part of the screen as it will appear in the User File itself. E.g

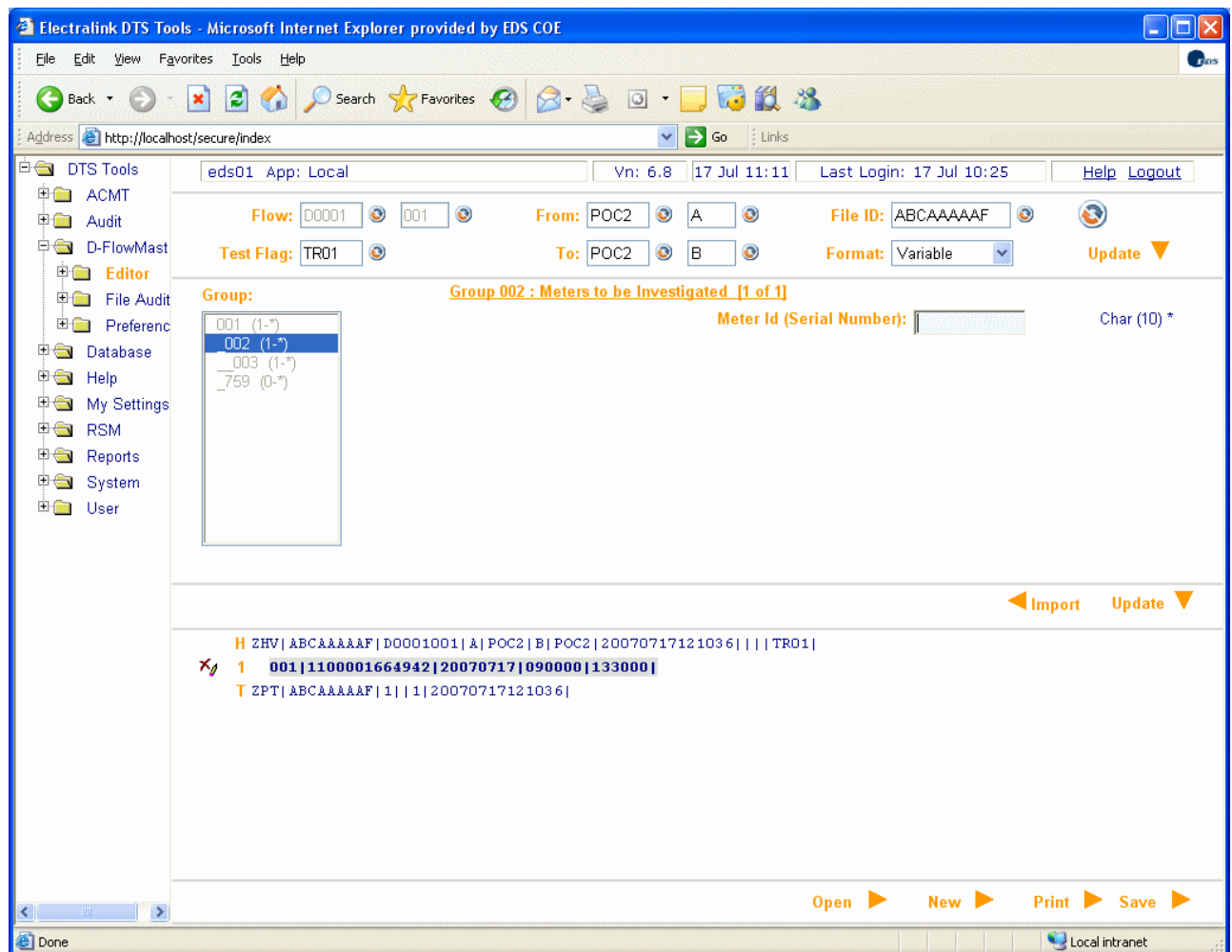


Figure 2-9 D-FlowMaster Appending a Group

The editor will then automatically present a data-entry form for the next Group in the flow. If it is not certain what the next Group should be the editor will make a best 'guess'.

If the Group chosen by the editor is not appropriate, use the Group selection box to select the desired Group. You will not be permitted to choose a Group that is not allowed to follow on from

the previously entered Group. Allowed Groups are highlighted in orange in the Group selection box.

2.1.5 Updating existing Groups or the Header

To update a Group anywhere in the file:




In the lower part of the window, click on the record to be updated. The editor will enter 'Update' mode and will display a data-entry form for the selected Group.

Make the appropriate changes and click on 'Update group'.

In addition to normal groups, the following header fields may be modified at any time during the editing of a user file:

- From MPID
- From Role
- To MPID
- To Role
- Test Flag
- File Id

Note: Administrators are able to lock header fields in the Header data-entry form, thus preventing users from selecting any other value than the default value defined in the user's preferences. Fields that are locked in this way will be disabled, appear greyed out, cannot be modified and do not respond to the F1 key.

To change the header, modify the header data entry form appropriately and click on 'Update'. You may revert 'From MPID', 'From Role', 'To MPID', 'To Role' and 'Test Flag' individually, to default values defined in your preferences by clicking on the  icon to the right of the field, or altogether by clicking on the  icon at the far right of the header data entry form. You may also reset the File Id to the next system generated File Id by clicking on the  icon to the right of the File Id field.

Note: You may revert to default values even if the header field value has been locked by an administrator and is disabled.

2.1.6 Changing File Format

The format of the file can be changed from any of the supported formats to another supported format at any time.

To change the file format, select the desired format in the header data entry form and click on 'Update'

When saving a file it will be saved in the currently displayed format.

2.1.7 Inserting Groups

There will be times when it is appropriate to insert Groups in the middle of a file.

To do this:


In the lower part of the window, click on the record immediately above the position where the new Group is to be inserted. The editor will enter 'Update' mode and will display a data-entry form for the selected Group.

Using the Group selection box, click on the code of the Group to be inserted below the selected record. The keyboard equivalent is to use SHIFT-TAB while the cursor is positioned on the first field of the data entry form and then use the cursor-up and cursor-down arrow keys to select the

desired group. Once the desired Group is highlighted in the group selection box, press ENTER to create a data entry form for that Group.

Fill in the data-entry form as appropriate and then press enter (↵) or click on 'Insert Group'.

2.1.8 Deleting Groups

To delete a Group and all its sub-groups, click on the  symbol on the left hand side of the Group. The editor will prompt you to confirm that the selected Groups should be deleted. E.g.

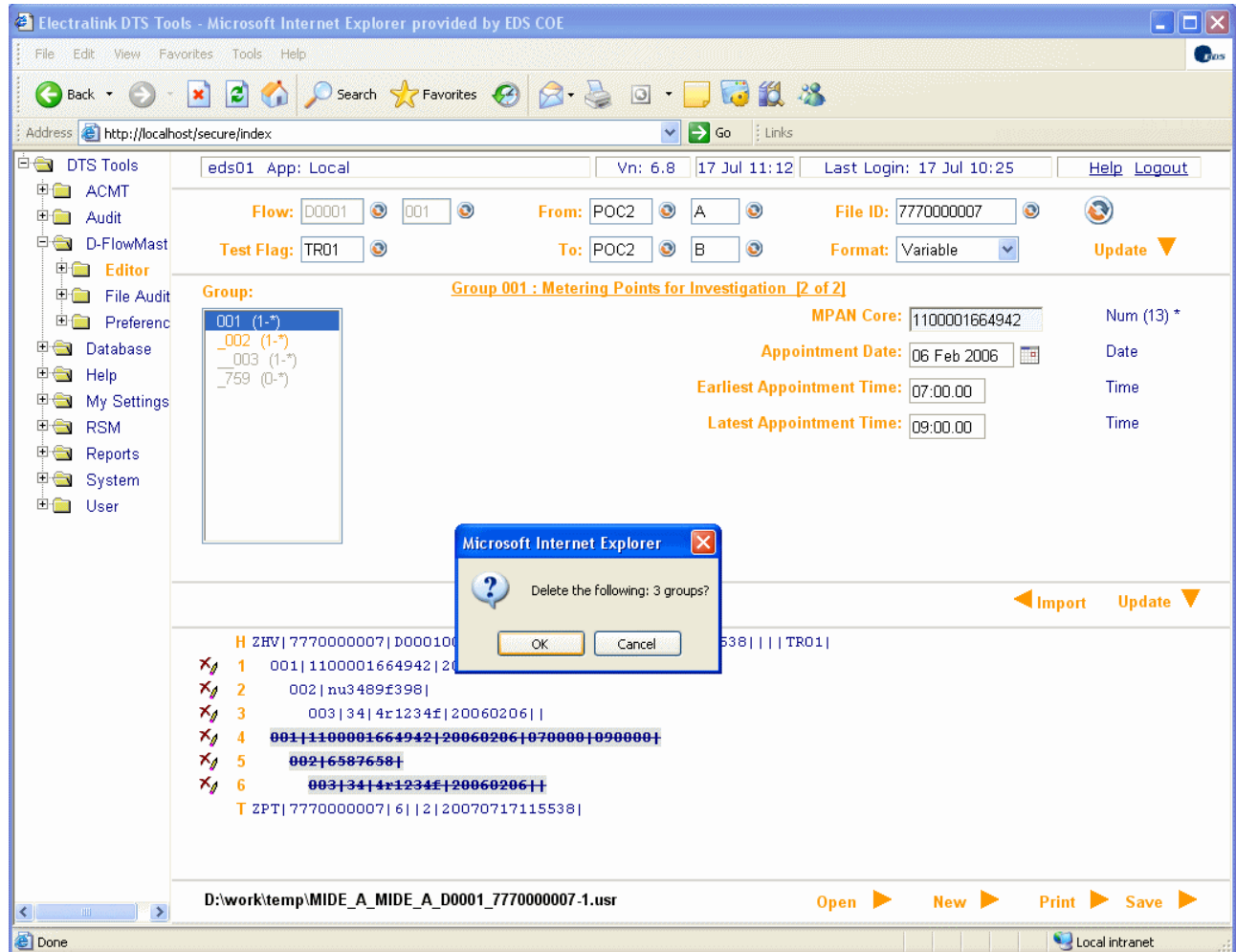


Figure 2-10 D-FlowMaster Deleting Groups

Click on OK to delete the Groups.

2.1.9 Importing Groups from an external file

D-FlowMaster allows groups to be imported from external files. The files may be in Fixed, Variable or Pool transfer format. For added flexibility, groups within the file may be delimited by either Windows or UNIX style line terminators (i.e. CR/LF or LF) and data items may be delimited by commas as an alternative to the pipe (“|”) delimiter used in variable and pool transfer format files. Files must otherwise be formatted according to User File encoding rules. Only records with group codes valid for the current flow can be imported. Headers, trailers, blank lines and lines beginning with characters which cannot be recognised as a valid group code for the flow will not be loaded. As a consequence of this it is not necessary for the file from which groups are to be imported to have header or trailer records.

To import groups from an external file:

1. Select the group in the User File content area of the screen below which you want to insert records from an external file. If the header and trailer are the only records present this is not necessary as records will simply be inserted between them.
2. Click on the 'Import' button, and use the resulting file dialog to open the external file from which groups are to be imported. After a file has been chosen a preview window will open displaying records from the file which have valid group codes for the current flow:



Figure 2-11 Importing Groups From External File

Records are shown in the format of the document into which they are being imported, not in the format of the file from which they have been extracted.

3. Use the checkboxes on the left hand side of the display to select the records to be imported. By default, all records are selected for import. Selecting/deselecting a group will select/deselect all descendant groups as well.
4. Once the desired groups have been selected, import them by clicking on the 'Import selected groups' button. Otherwise press the 'Cancel' button to abort the import.

2.1.10 Printing a file

To print a hard copy of the file from within the editor click on the 'Print' button at the foot of the browser window.

A printer selection window will appear allowing you to select the print device to send the print job to.

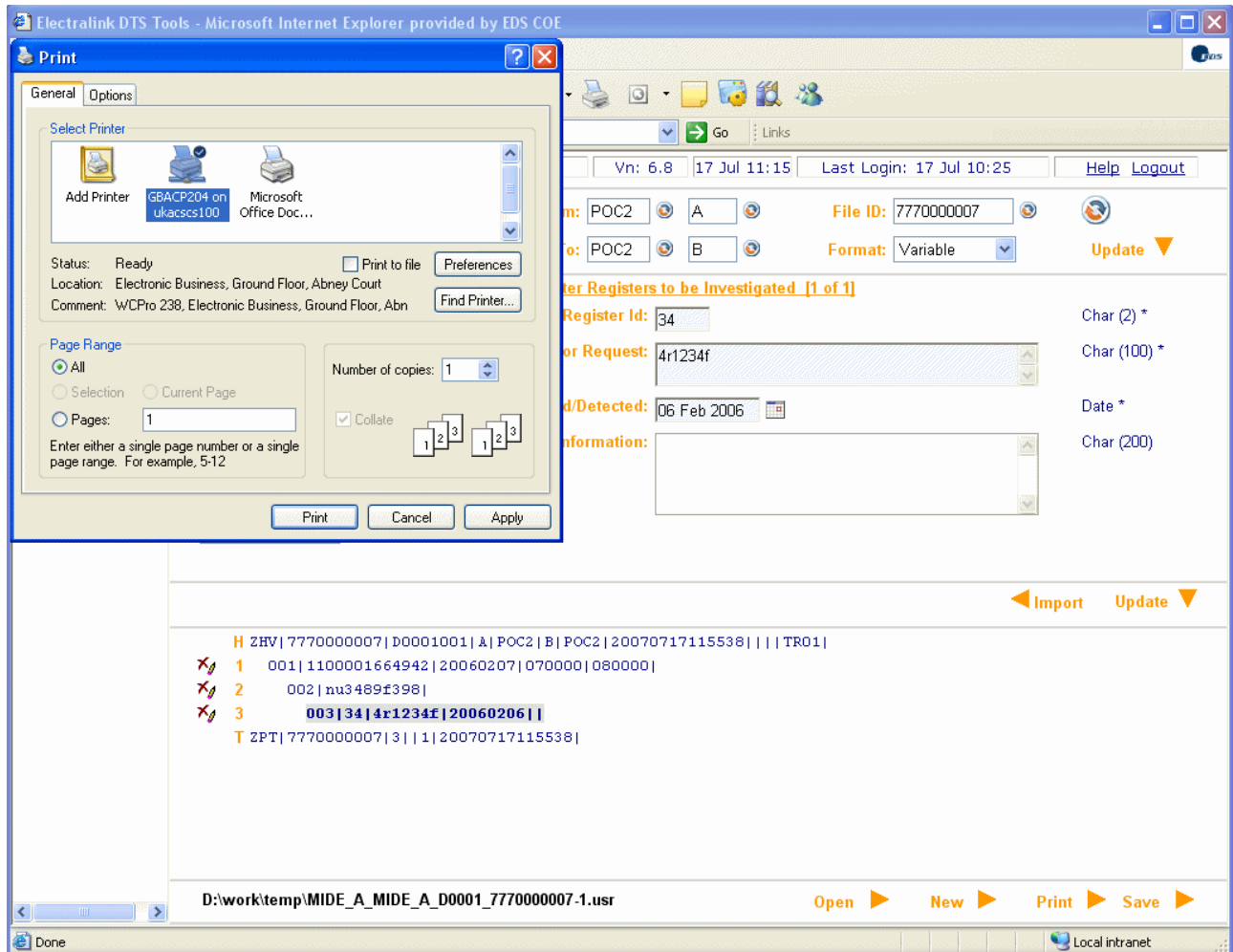


Figure 2-12 D-FlowMaster Print File

Select the desired printer and click on 'Print'.

2.1.11 Starting a new file

To start a new file after working in the editor on another file, click the 'New' button at the foot of the browser window.

If you have not saved the changes made to the file currently displayed in the editor you will be prompted to do so. E.g.

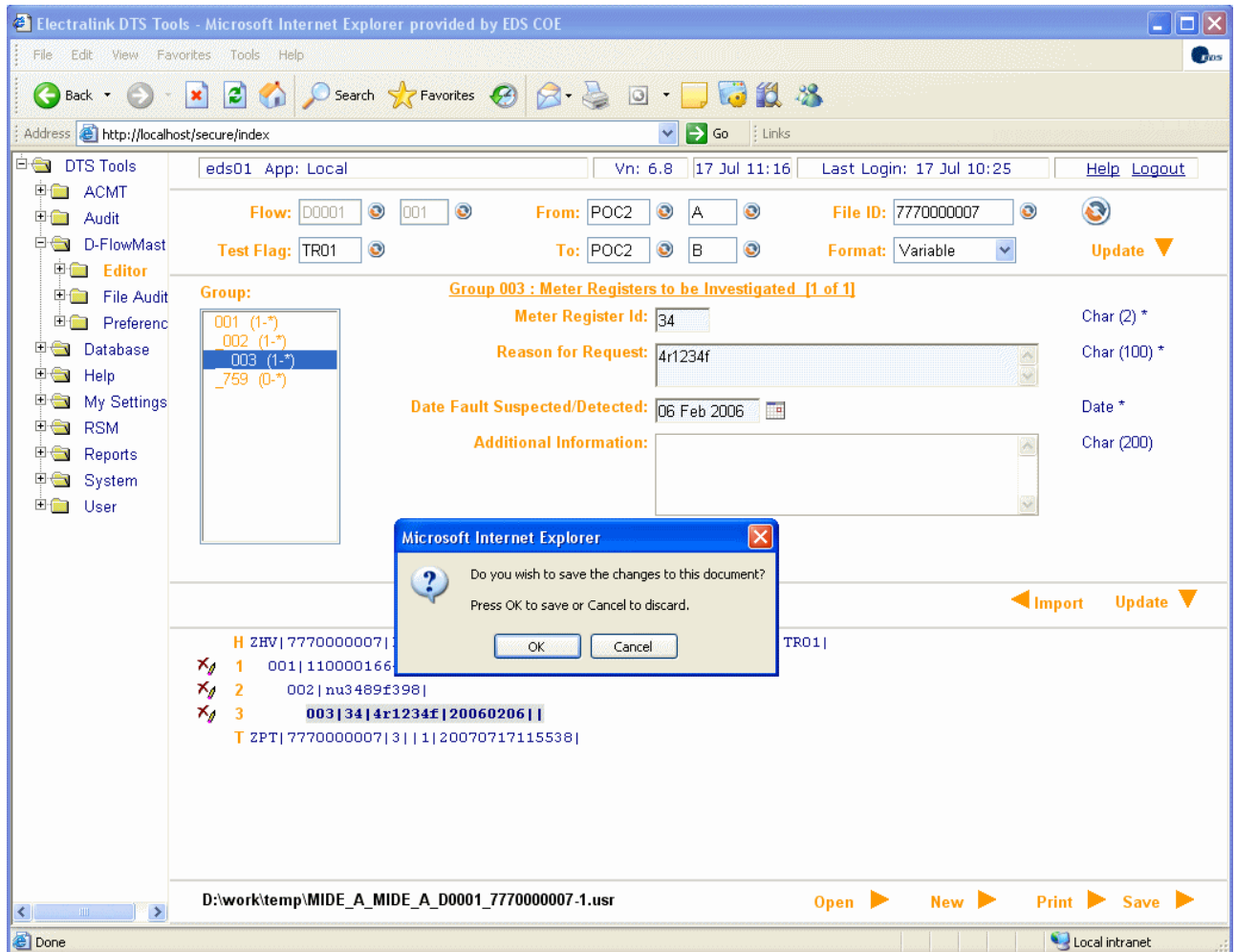


Figure 2-13 D-FlowMaster Starting A New File

After saving the changes, or discarding them, the editor window will be cleared apart from the header fields. The header fields will remain the same as for the previously edited file except the file id will be updated to the next preferred file id. E.g

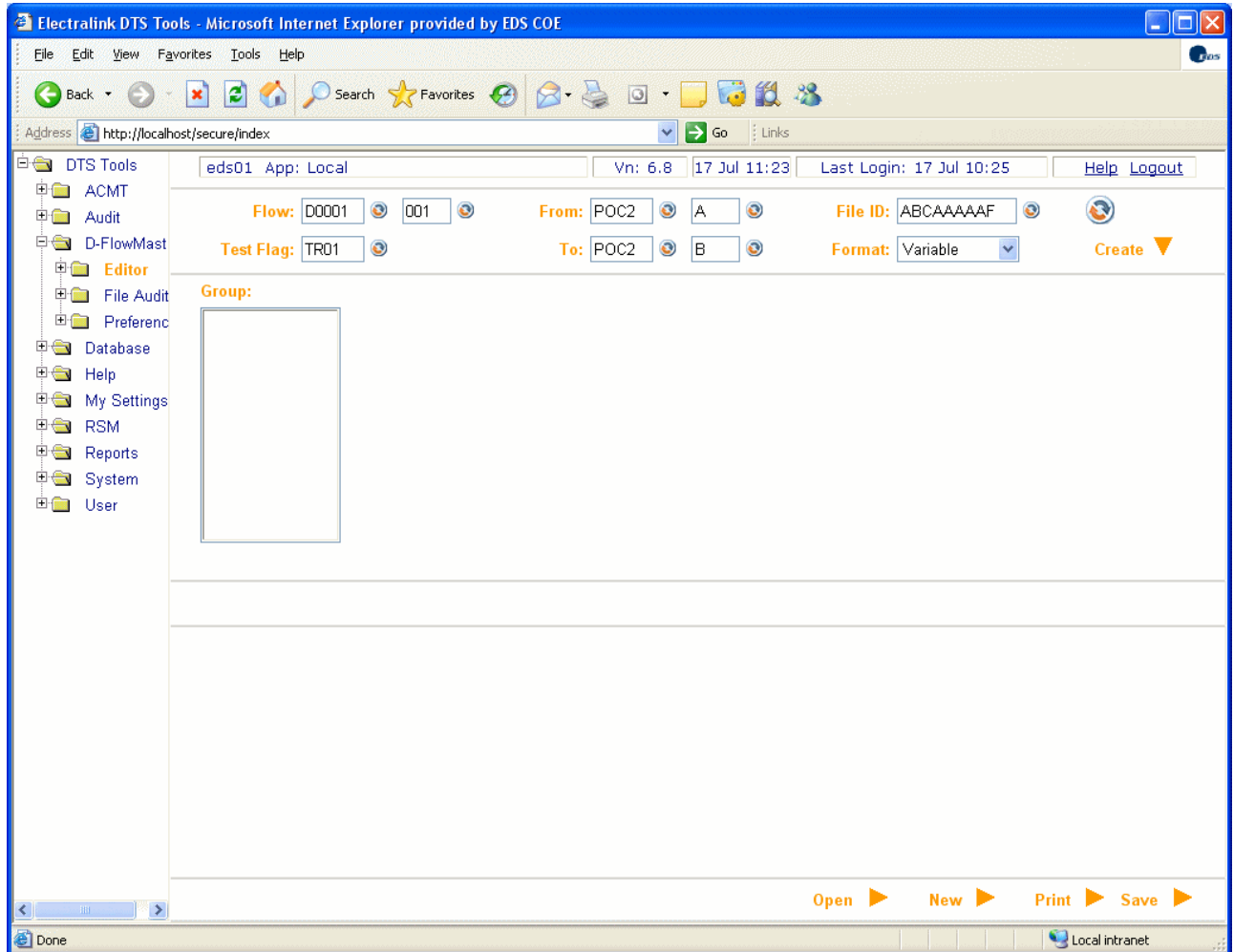




Figure 2-14 D-FlowMaster Starting A New File

You may revert to default header values, if desired, by clicking on the individual field reset icon  or on the reset all fields icon, .

2.1.12 Data Entry

Data-entry forms show all the Data Items for the selected Group. Each field is labelled on the left with the Data Item's name and on the right with the Data Item's data type, logical length, and an asterisk if the field requires a value (i.e. is mandatory). Mandatory fields also have a light blue back-ground. Optional fields do not.

Use the TAB key to move the data-entry cursor from one data-entry field to another.


All entries are validated against the rules for the Data Item's data type. If you enter an invalid value into a field the editor will display an error message and display  next to the field. E.g.

Figure 2-15 D-FlowMaster Data Entry

If you press enter (↵) or click on ‘Update Group’ in an attempt to update the Group without correcting the error, the editor will display a further error message like this:

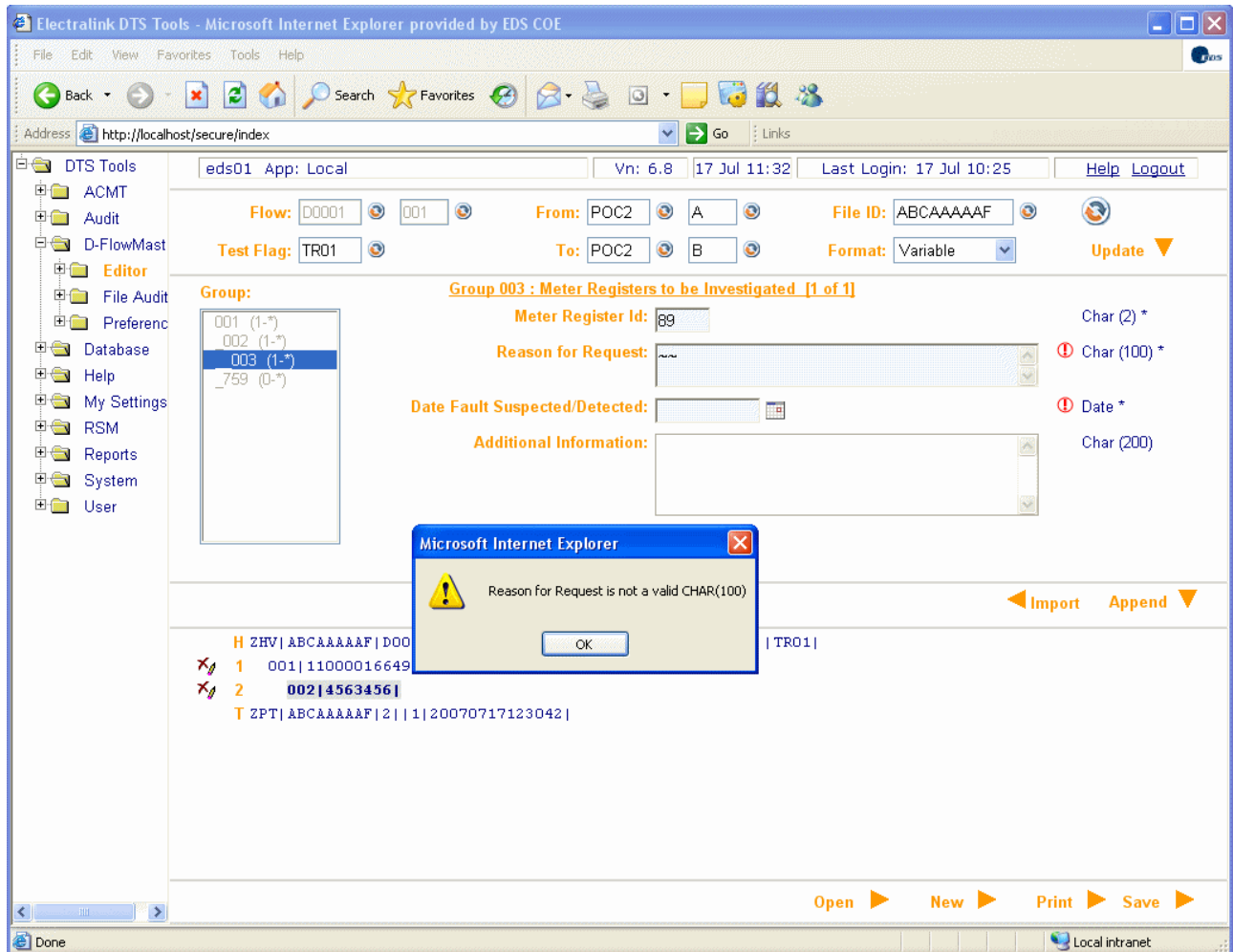



Figure 2-16 D-FlowMaster Data Entry

2.1.12.1 Date, Time and Date-Time Fields

Date and time fields are displayed in a different format to that used in the User File itself. This is to make the fields easier to read.

A number of data-entry shortcuts exist within the editor to make entry of dates and times easier for the user.

Here are some examples:

Field Type	Short-cut	Equates to
DATE	T	Todays date
DATE	12	12 th day of the current month
DATE	12.03 or 12 03	12 th March of the current year
DATE	12.04.05 or 12 04 05	12 th April 2005
DATE		Invokes a calendar pop-up which can be used to choose a date.
TIME	7	07:00:00

TIME	730 or 7 30 or 7.30 or 7:30	07:30:00

2.1.12.2 Select Fields

Where the DTC/EFD defines the complete set of valid values for a Data Item these are displayed in a select field. Click on the arrow button at the side of the field to show the full list of possible values or use the cursor-up and cursor-down arrow keys to move through the options.

2.2 FILE AUDIT

Each time you a) save a file using the editor or b) load a file from disk that does not pass validation, an audit record is stored in the DTS database. These records can be viewed by selecting 'File Audit' from the menu on the left hand side of the browser window.

Over time, you may generate a large number of audit records so the 'File Audit' screen allows you to enter search criteria to help you find audit records of interest.

Only you or colleagues who are authorized to use the ACMT and/or Audit tools for the Gateway with which you are associated can view the history of files that you have saved.

If the file still exists in the location recorded in the audit record then you can open the file in the editor by clicking on the record.

An example 'FileAudit' display is shown below.

Electralink DTS Tools - Microsoft Internet Explorer provided by EDS COE

File Edit View Favorites Tools Help

Address: http://electralink-webtools:8080/secure/index

clientbes Business Exchange Vn: 6.5 4 Oct 14:25 Last Login: 04 Oct 13:18 Help Logout

FILE SEARCH CRITERIA

Login Id: clientbes

Local MPID/Role: Other MPID/Role:

Flow: Version:

Test Flag: Any User File ID:

Filename:

Date/Time - From: 4 Oct 2006 00:00 Date/Time - To: 4 Oct 2006 23:59

Action: Read ☐ Written ☐ Both ☒

Reset Search

Page 1 of 1
6 messages

Login Id	Date/Time	User File ID	Flow	Vn	TF	MPID Role	MPID Role	R/W	Filename
clientbes	04 Oct 2006 13:55	777000000H	D0001	001	TR01	BIZZ	C	R	C:\temp\ABC_C_BIZZ_C_D0001_777000000H.usr
clientbes	04 Oct 2006 13:55	777000000H	D0001	001	TR01	BIZZ	C	W	C:\temp\ABC_C_BIZZ_C_D0001_777000000H.usr
clientbes	04 Oct 2006 13:54	TEST05	D0082	001	OPER	REG3	C	R	C:\temp old\regTest\RegTestIP_2_4_180_1.txt
clientbes	04 Oct 2006 13:53	0023266835	D0149	001	OPER	UUNL	M	R	C:\temp old\0149011105014808.err2
clientbes	04 Oct 2006 13:52	777000000J	D0004	001	MIDE	A	R	R	ci:\temp\MIDE_A_MIDE_A_D0004_777000000J.usr
clientbes	04 Oct 2006 13:49	777000000B	D0010	001	OPER	MIDE	A	R	ci:\temp\MIDE_A_MIDE_A_D0010_777000000B-invalid.usr

Print Page Refresh First Previous Next Last

Applet fileHelper started Local intranet

Figure 2-17 D-FlowMaster File Audit


2.3 SEARCHING FOR A MESSAGE

1. To search for a Message, from the drop lists, select the relevant criteria and in the text field enter the relevant information.

For all text fields except 'Filename' and 'User File ID', multiple entries can be entered by separating each entry with a space. For example, ABCD JKLM WXYZ. The 'Filename' and 'User File Id' text fields can accept a % as a wild card. For example, entering %D0004% in the filename field will return all files with 'D0004' somewhere in their name.

2. Click **Search** .

Results of the search are displayed in the File Search Results table in the lower half of the window.

3. To reset the search criteria click **Reset** .

This clears all previous search criteria except:

- the date field, which displays the current date
- the time from field, which displays 00:00
- the time to field, which displays 23:59.

2.4 SEARCH CRITERIA

The following criteria can be used to search for a Message:

Login Id	The Login Id of the person who performed some operation on the files to be searched. By default this will be the currently logged in user. However, the login ids of other users with ACMT or AUDIT access rights to the same Gateway(s) as the logged in user has ACMT or AUDIT access rights, can also be selected from the drop down list.
Local MPID	The Market Participant Identifier (MPID) of the sender of the file. To enter a Local MPID, type the identifier in the text field. Multiple entries must be separated by a space.
Other MPID	The Market Participant Identifier (MPID) of the intended recipient. To enter an Other MPID, type the identifier in the text field. Multiple entries must be separated by a space.
Local Role	The sender's Role. The Role is the function a company provides within the electricity industry. To enter a Local Role, type the Role in the text field. Multiple entries must be separated by a space.
Other Role	The Role of the recipient. The Role is the function a company provides within the electricity industry. To enter an Other Role, type the Role in the text field. Multiple entries must be separated by a space.
Flow	The number or name assigned to a specific Data Flow or File Type. To enter a Flow, type the Flow Number (including the D prefix e.g. D0010) in the text field. Multiple entries must be separated by a space.






Version	<p>Data Flow Version number of the File.</p> <p>To enter a Version, type the Data Flow Version number in the text field.</p> <p>Multiple entries must be separated by a space.</p>
Test Flag	<p>The Message Test Flag/File Usage Code.</p> <p>This can either be a standard Test Flag selected from the drop-down list or a non-standard, free-format Test Flag entered in the adjacent field. The system ensures that only a single Test Flag can be supplied for a search.</p> <p>Selecting 'Any' will search for Messages containing any Test Flag.</p>
User File ID	<p>The File Identifier assigned by the sender of the File</p> <p>To enter a File ID, type the File ID in the text field. Multiple entries must be separated by a space.</p> <p>If a partial File ID is specified, any Message whose File ID starts with the characters entered will be displayed.</p>
Filename	<p>The Filename used by the local Gateway.</p> <p>To enter a Filename, type the Filename in the text field.</p> <p>If a partial filename is specified, any Message whose filename starts with the characters entered will be displayed.</p> <p>(Note filename is the full path to the file on your local file system.).</p>
Date/Time – From	<p>A User can search for Files saved or read between a defined date range.</p> <p>If no date and time are defined, the date defaults to the current date and the time defaults to 00:00hrs.</p>
Date/Time – To	<p>A User can search for Files saved or read between a defined date range.</p> <p>If no date and time are defined, the date defaults to the current date and the time defaults to 23:59hrs.</p>
Action	<p>The action performed on the file.</p> <p>A User can search for Files that have been:</p> <ul style="list-style-type: none"> • Read = Invalid files read from disk • Written = Files written to disk • Both = Read or written

2.5 MESSAGE SEARCH RESULTS TABLE

The fields in the Message Search Results Table are detailed below:

Login Id	This shows the login id of the user who performed an operation on the file
Date/Time	This displays the date and time that the user read or saved the file.
S/R	Displays 'S' where the Message has been sent by the local Gateway. Displays 'R' where the Message has been received by the local Gateway.
User File ID	The file identifier assigned to the file by the sender.
Data Flow	Flow Number e.g. D0010. The number or name assigned to a specific Data Flow/File Type.
Vn	Data Flow Version number. The version number changes when a Data Flow is modified. RGMA File Types always have a version number of 001.
TF	The Test Flag of the File.
From MPID	Displays the Market Participant Identifier (MPID) of the sender
From Role	Displays the Role of the sender.
To MPID	Displays the Market Participant Identifier (MPID) of the receiptient.
To Role	Displays the Role of the recipient
R/W	Indicates whether the file was read (R) or written (W) by the user.
Filename	The full path name of the file relative to the user's workstation.
Page 1 of 1	Displays the current page a User is viewing and the total number of pages.
1 message	The total number of Files returned by the search

A maximum of 100 Files are displayed per page in the Table of Results and can be viewed using the scroll bar.

1. To display the next page of Files, click **Next** .
2. To display the previous page of Files, click **Previous** .
3. To display the last page of Files, click **Last** .
4. To return to the first page of Files, click **First** .
5. To update the results, click **Refresh** .

2.6 PREFERENCES

Before using D-FlowMaster™, each user authorised to use the tool must, at a minimum, have the following three preferences defined:

1. **Base directory.** This is the directory where the open and save file browsers will start browsing. The user's local security policy must allow read and write access to this directory as a minimum.
2. **Next file id.** This is a CHAR(10) value that D-FlowMaster™ will use to automatically populate the File Id field of any new user files created in the editor. If the user saves a file with this id, D-FlowMaster™ will increment the next file id preference value by one. The sequence followed depends on the file id template that you have defined. (See below).

3. **File Id template**. A template may comprise of boiler plate text and the following special characters:

A – Uppercase characters A-Z
a – Lowercase characters a-z
9 – Digits 0-9
X – Uppercase characters A-Z and digits 0-9
x – Lowercase characters a-z and digits 0-9

Boilerplate text must be enclosed in double quotes. For example, the template

“ABC”99999999

would result in file ids being generated that follow this sequence:

ABC00000001, ABC00000002, ABC00000003 and so on.

The file id preference allows the user to define the next file id to be used (the starting point of the sequence), but it must conform to the template.

Note: After creating or modifying the base directory preference, the user whose preference has changed must, if currently logged in, log out and back in again to make the change effective.

The following preferences allow default values for User File header fields and the file format to be set for the user and are optional:

- Default Sender MPID
- Default Sender Role
- Default Receiver MPID
- Default Receiver Role
- Default Flow
- Default Flow Version
- Default Test Flag
- Default Format

The **Custom Filename Template** preference is also optional. If it is not defined a default template will be used. To specify a custom template, enter one or more of the following placeholder tokens separated by the underscore character, “_”:

Token	Description
TOMPID	Receiver MPID
TOROLE	Receiver Role
FRMMPID	Sender MPID
FRMROLE	Sender Role
FILEID	User File Id
FLOW	Flow Id
FLOWVER	Flow version
TSTFLG	Test Flag

FMT	Flow format (P,V or F)
USER	User's WebTools username

Tokens may be placed in any order. When the filename is generated the token will be replaced by the corresponding file attribute, and the suffix “.usr” will be applied. The default template is:
TOMPID_TOROLE_FRMMPID_FRMROLE_FLOW_FILEID

The **“Always use filename template?”** preference defaults to No. When set to ‘No’ all files loaded into D-FlowMaster, modified, and saved back to disk will retain their original filename regardless of any changes to the file header, format or person making the change. However, when set to ‘Yes’ the filename is regenerated each time the ‘Save’ button is pressed, so if there has been a change to the one of the file attributes that are referenced by the file name template, the generated name will be different from that originally loaded. Depending on the value of the next preference, **“Always Save to Base Directory?”** the user may be able to override the generated name before the file is actually saved to disk.

The **“Always Save to Base Directory?”** preference also defaults to ‘No’. When set to ‘No’ a dialog window is opened whenever the ‘Save’ button is pressed in the D-FlowMaster editor, allowing users to save to any directory they have access to. It also allows the user to override the generated filename. However, when set to ‘Yes’, files are saved directly to the user’s base directory.

The **“Update File Id on Save?”** preference defaults to ‘Never’. Other options are ‘Prompt’ and ‘Always’. When set to ‘Never’ the file id of the document currently loaded in the DFM editor is never changed when the file is saved. When set to ‘Always’ the file id of the document currently loaded in the DFM editor is always changed to the ‘Next File Id’. When set to ‘Prompt’ the user is asked whether to update the file id of the currently loaded document or not.

The **“Flow Requirements”** preference defaults to ‘Warn on invalid MPIDs and Roles’. Other options are ‘Allow invalid MPIDs and Roles’ and ‘Disallow invalid MPIDs and Roles’. This preference determines how D-FlowMaster behaves when you try to create a new flow where the sender or receiver MPID/Role combination is not valid according to the flow requirements defined in the DTC and EFD catalogues. The ‘Allow invalid MPIDs and Roles’ option will permit any flow to be created with any sender and receiver MPID/Role. The ‘Disallow invalid MPIDs and Roles’ option will display an error message if either sender or receiver, or both, MPID/Role combinations are invalid and will prevent the flow from being created. Finally, the ‘Warn on invalid MPIDs and Roles’ option will display a warning message if either sender or receiver, or both, MPID/Role combinations are invalid and will give the user the option to create the flow or abort.

The **“Restrict sender MPID/Role”** preference defaults to ‘No’. The other available option is ‘Yes’. When set to ‘No’, the user can set the sender MPID and Role Code in the header of any flow he creates to any MPID or Role code known to the DTS. When set to ‘Yes’ the user can only set the sender MPID and Role code to those in his scope of access. Furthermore DFM will prevent the flow from being created if the combination of MPID and Role Code is not in the user’s scope of access.

Preferences can either be set by the user themselves, their user group administrator or the system administrators. Administrators can, however, lock a user’s preference value preventing that user from changing the preference value themselves. Similarly, administrators can lock some preference values so that the DFM user cannot select any other value when creating or modifying User Files in the DFM editor.

The screen through which administrators set preferences is shown below:

Electralink DTS Tools - Microsoft Internet Explorer

Address: http://localhost:8080/secure/index

DFMADMIN App: Local Vn: 7.7 13 Jun 15:48 Last Login: 08 Jun 13:49 Help Logout

User: DFMUSER (DFM User)

Lock preference? Lock in editor?

Base Directory:	<input type="text" value="file:/c:/temp"/>	<input type="checkbox"/>	
File Id Template:	<input type="text" value="DFM*9999999"/>	<input type="checkbox"/>	
Next File Id:	<input type="text" value="DFM0000015"/>	<input type="checkbox"/>	<input type="checkbox"/>
Update File Id on Save?:	<input type="text" value="Always"/>	<input type="checkbox"/>	
Default Sender MPID:	<input type="text" value="POC1"/>	<input type="checkbox"/>	<input type="checkbox"/>
Default Sender Role:	<input type="text" value="1 - Role 1"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restrict sender MPID/Role:	<input type="text" value="No"/>	<input type="checkbox"/>	
Default Receiver MPID:	<input type="text" value="POC2"/>	<input type="checkbox"/>	<input type="checkbox"/>
Default Receiver Role:	<input type="text" value="2 - Role 2"/>	<input type="checkbox"/>	<input type="checkbox"/>
Default Flow:	<input type="text" value="D0005 - Instruction on Action"/>	<input type="checkbox"/>	<input type="checkbox"/>
Default Flow Version:	<input type="text" value="001"/>	<input type="checkbox"/>	<input type="checkbox"/>
Default Test Flag:	<input type="text" value="TR01"/>	<input type="checkbox"/>	<input type="checkbox"/>
Default Format:	<input type="text" value="Pool Transfer"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flow Requirements:	<input type="text" value="Allow invalid MPIDs and Roles"/>	<input type="checkbox"/>	
Custom Filename Template:	<input type="text" value="USER_FMT_TSTFLG_FLOWVER_FLOW_FILE"/>	<input type="checkbox"/>	
Always use Filename Template?:	<input type="text" value="Yes"/>	<input type="checkbox"/>	
Always Save to Base Directory?:	<input type="text" value="Yes"/>	<input type="checkbox"/>	

Save ►

Done Trusted sites

Figure 2-18 D-FlowMaster Preferences (Administrator View)

To define or change preferences for a user, select that user from the drop down list, fill in the form fields appropriately and click save. If your changes are valid they will be saved and a dialog message will appear confirming that the changes have been saved.

Checking the ‘Lock Preference?’ option will prevent that user from being able to modify that preference themselves.

Checking the ‘Lock in editor?’ option will prevent that user from choosing any other value when creating or modifying User files in the D-FlowMaster™ editor.

Electralink DTS Tools - Microsoft Internet Explorer

Address: http://localhost:8080/secure/index

DFMUSER DFM User Vn: 7.7 13 Jun 15:52 Last Login: 13 Jun 15:35 Help Logout

Base Directory: file:/c:/temp

File Id Template: DFM*9999999

Next File Id: DFM0000015

Update File Id on Save?: Always

Default Sender MPID: POC1

Default Sender Role: 1 - Role 1

Restrict sender MPID/Role: No

Default Receiver MPID: POC2

Default Receiver Role: 2 - Role 2

Default Flow: D0005 - Instruction on Action

Default Flow Version: 001

Default Test Flag: TR01

Default Format: Pool Transfer

Flow Requirements: Allow invalid MPIDs and Roles

Custom Filename Template: USER_FMT_TSTFLG_FLOWVER_FLOW_FILE

Always use Filename Template?: Yes

Always Save to Base Directory?: Yes

Save

Figure 2-19 D-FlowMaster Preferences (Normal user view)

In the screen shot above, the Base Directory field is disabled, showing that an administrator has locked that privilege down, preventing the user from altering the value set by the administrator. Any number of fields can be locked in this way.

Notes on setting preferences:

- The value for Base Directory must be entered as a file URL. If your base directory is D:\a\b\c then the file URL will be file:/d:/a/b/c.

3 APPENDIX- A: D-FLOWMASTER PRE-REQUISITES

3.1 SUN JAVA PLUG-IN

D-FlowMaster makes use of a Java applet to read and write user files to the local file system. This applet requires the SUN Java Run-time Environment (JRE) plug-in to be installed on your workstation.

HP support the use of JRE version 1.5 which can be downloaded from <http://java.sun.com/j2se/1.5.0/download.jsp>. Installation instructions can be found there too.

3.2 SECURITY POLICY

To allow the applet used by D-FlowMaster to read and write files from your local file system you must grant the applet permission to do so via a security policy file.

Specifically the applet requires the following permissions:

RuntimePermission “ModifyThread”

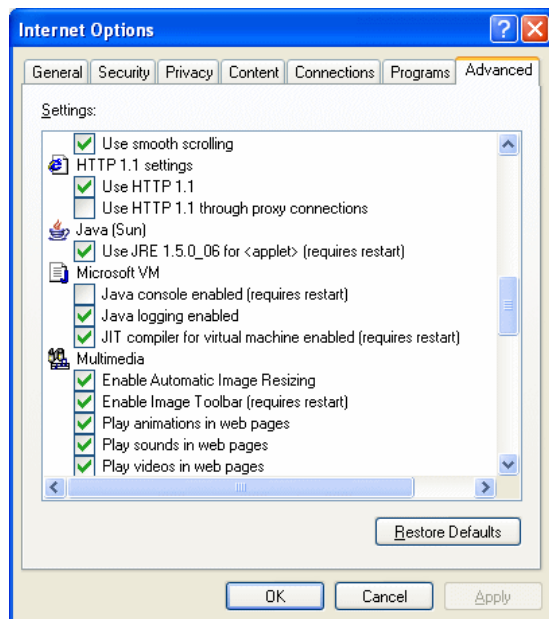
PropertyPermission to read the user.dir system property.

FilePermission – to read and write to directories where you store User Files

The following subsections guide you through the process of setting-up your Security Policy file to grant these permissions, assuming that JRE 1.5 has been installed on your workstation.

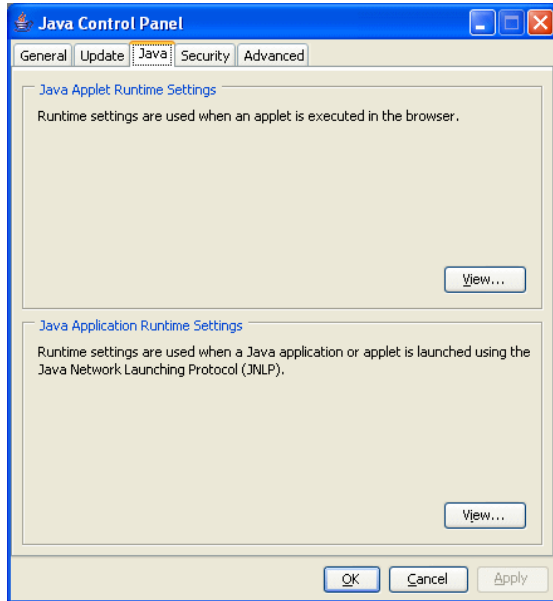
3.2.1 Find the JRE version used by your browser.

In IE, select “Tools -> Internet Options” from the Web browser’s menu bar. Select the “Advanced” tab, and scroll down until the “Java (Sun)” category appears. Take a note of the JRE version used by the browser to execute applets (E.g. Use Java 2 v1.5.0_06 for <applet>...)

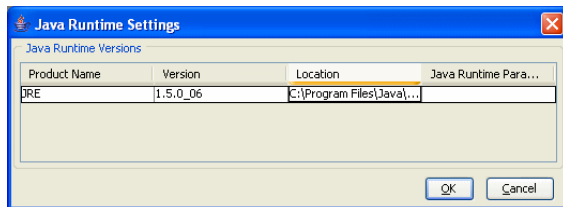


3.2.2 Find the location of the JRE used by your browser.

To do this, start Web Tools. The browser will attempt to load the FileHelper applet used by D-FlowMaster. The applet will not run successfully but the “Java (TM) 2 Platform” icon will appear in the system tray in the bottom right hand corner of the screen. Right click on this icon and select “Open Control Panel” from the pop-up menu. Click the “Java” tab, then click the “View...” button under [Java Applet Runtime Settings](#).



This will bring up the following dialog:



Find the entry in the “Java Runtime Environment” drop down list that identifies the installation directory of the JRE version used by the browser.

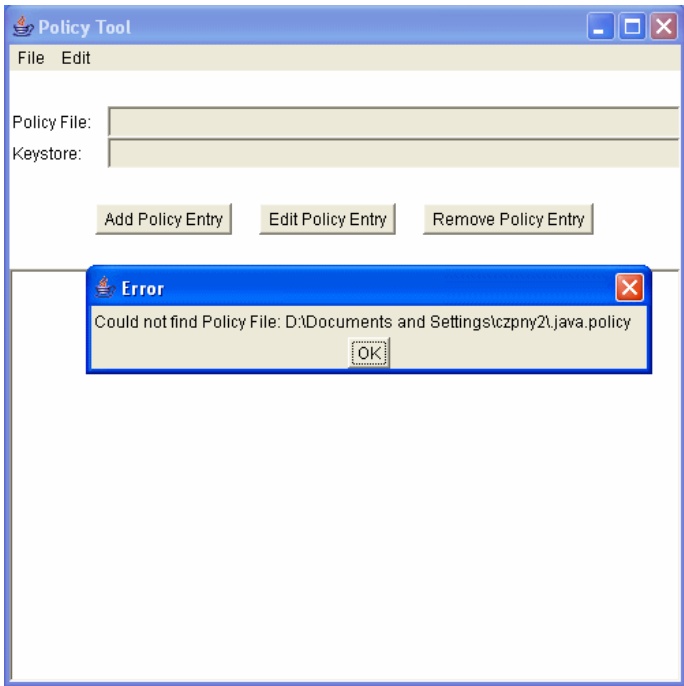
3.2.3 Create a policy file using the Policy Tool

Open a command window and change directory to the binary folder of the JRE installation directory. E.g.

```
cd c:\program files\java\jre1.5.0_06\bin
```

Start the Java security policy tool.

```
policytool
```



If, as is likely, the policy tool reports an error declaring that it could not find a policy file in your home directory, take a note of the file path and then click OK to remove the error message. Then select “File -> Save As” from the menu and save the file to the location and with the same name as shown in the error message.

Click “Add Policy Entry” to get the following dialogue box:

In the “CodeBase” field enter: <http://electralink-webtools/secure/applets/>

If you are a user of the remote user Gateway enter <http://electralink-rug-webtools/secure/applets/>

This means that only applets loaded from this URL will be granted the permissions you are going to configure.

Click “Add Permission” to get:

Use the drop down lists to change:
 “Permission” to “RuntimePermission”
 “Target Name” to “modifyThread”

Click “OK”

Repeat the above steps to add the following permissions:

Permissions

Add New Permission:

PropertyPermission
Target Name: user.dir
read
Signed By:

OK Cancel

Note that “user.dir” should be typed exactly as “user.dir” (without the double quotes).

Permissions

Add New Permission:

FilePermission
Target Name: c:\Documents and Settings\czpny2\
read, write, delete, execute
Signed By:

OK Cancel

Where “Target Name” points to your user home directory.

Permissions

Add New Permission:

FilePermission
Target Name: c:\
read, write, delete, execute
Signed By:

OK Cancel

Note the last permission gives read and write access to the root directory on the c: drive and is used here as an example only. Please read the note below..

Permissions

Add New Permission:

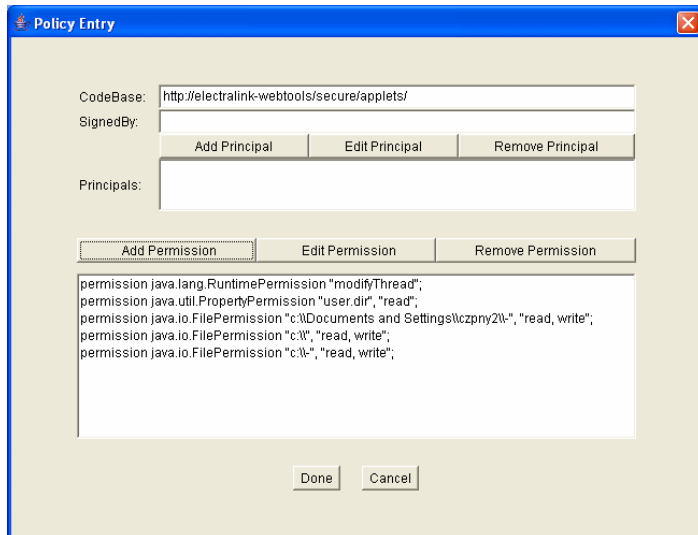
FilePermission
Target Name: c:\-
read, write, delete, execute
Signed By:

OK Cancel

Note the hyphen in the above permission gives read and write access to all directories and sub-directories rooted in C:\ and is used here as an example only. Please see the note below.

It is expected that you will substitute c:\ and c:\- with values corresponding to your choice of BASE_DIRECTORY (e.g c:\user files\ & c:\user files\-) as described in [D-FlowMaster-Preferences](#) above.

After adding the above permissions the Policy Entry appears like this:



Click “Done”.

Select “File -> Save” from the menu.

Exit the policy tool.

Note that once the java security policy has been created, it can be amended using notepad or some other suitable editing tool; however please note that this should be done with caution.

Below is an example of a java security policy file as displayed by an editing tool. – note that all directory names must use a double “\\” delimiter. The example has been produced for a user who’s home directory is d:\Documents and Settings\czpny2. Data flows will be written to a directory called d:\dflow_temp and this must match the setting for BASE_DIRECTORY in the Preferences section of D-FlowMaster (see section [D-FlowMaster-Preferences](#) above).

```
/* AUTOMATICALLY GENERATED ON Thu Mar 16 09:58:11 GMT 2006*/
/* DO NOT EDIT */
```

```
grant codeBase "http://electralink-webtools/secure/applets/" {
    permission java.lang.RuntimePermission "modifyThread";
    permission java.util.PropertyPermission "user.dir", "read";
    permission java.io.FilePermission "d:\\Documents and Settings\\czpny2\\", "write, read";
    permission java.io.FilePermission "d:\\dflow_temp\\", "write, read";
    permission java.io.FilePermission "d:\\dflow_temp\\-", "write, read";
};
```

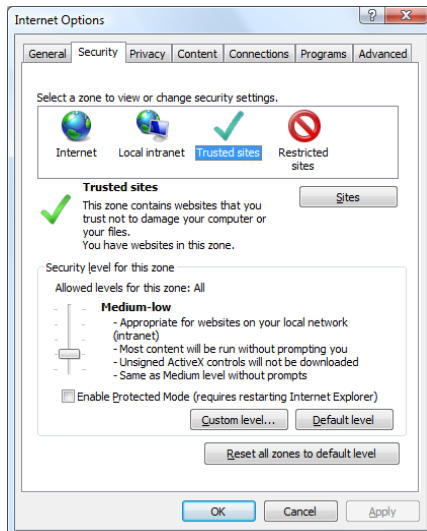
3.3 INTERNET EXPLORER 7 AND ABOVE

Starting with IE7, Microsoft introduced a further level of security in their browser known as protected mode. This level of security will prevent D-FlowMaster from accessing files on your local file system, even if the Java security policy permits it. Therefore protected mode must be disabled when using D-FlowMaster.

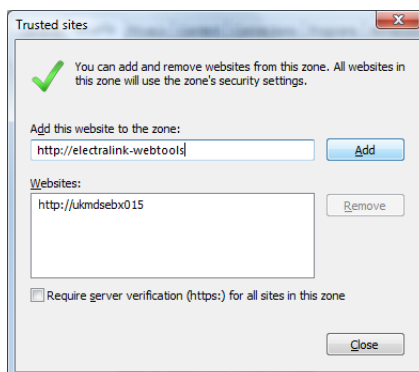
The simplest way to disable protected mode while running D-FlowMaster is to add the WebTools website to your list of trusted sites and ensure that protected mode is switch off for trusted sites.

Do this as follows:

1. Select 'Internet Options' from the Tools menu in IE7.
2. Select the security tab and then click on 'Trusted Sites'. The dialog should look like this:



3. Ensure 'Enable Protected Mode' is not checked (as shown above).
4. Click on the 'Sites' button.
5. Type 'http://electralink-webtools' or 'http://electralink-rug-webtools' if a RUG user, in the field labelled 'Add this website to the zone:', as shown below:



6. Click the 'Add' button to the site to your list of trusted sites, and then click close.
7. Click on 'OK' to close the 'Internet Options' dialog.
8. Re-start IE7 before attempting to use D-FlowMaster to access files on your local file system.